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ABSTRACT

Mexican American and Anglo secondary school teacher perceptions of Mexican American students were investigated and compared. The instrument used to retrieve the data was administered to 112 teachers in the three Dona Ana (N.M.) county school districts. Six constructs resulted from the factor analysis of the instrument, namely, achievement, time orientation, acculturation, family identification, economic, and religiousity. Reliability of factors was established through Cronbach's Co-efficient Alpha, and item reliability was obtained through item analysis. Forty of the original 50 items were used to compare the groups on each of the six dimensions. Using ethnicity, age, and teaching experience as variables, t tests were computed to test for significant differences. Differences with respect to ethnicity were found in four of the constructs: achievement, time orientation, acculturation, and religiousity. Age and teaching experience were not variables influencing the differences in attitude between the two teacher groups. Educational importance, implications and recommendations based on the findings of the study conclude the paper. (Author)

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CULTURAL AWARENESS INVENTORY

BY

J. D. BACA

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CULTURAL AWARENESS INVENTORY*

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A paper presented at the annual meeting of the Rocky Mountain Educational Research Association, Las Cruces, New Mexico, November 16-17, 1972.

ABSTRACT

Mexican American and Anglo secondary school teacher perceptions of Mexican American students were investigated and compared. The instrument used to retrieve the data was administered to 112 teachers in the three Dona Ana (N. M.) county school districts. Six constructs resulted from the factor analysis of the instrument, namely, achievement, time orientation, acculturation, family identification, economic, and religiousity. Reliability of factors was established through Cronbach's Co-efficient Alpha, and item reliability was obtained through item analysis. Forty of the original 50 items were used to compare the groups on each of the six dimensions. Using ethnicity, age, and teaching experience as variables, t tests were computed to test for significant differences. Differences with respect to ethnicity were found in four of the constructs: achievement, time orientation, acculturation, and religiousity. Age and teaching experience were not variables influencing the differences in attitude between the two teacher groups. Educational importance, implications and recommendations based on the findings of the study conclude the paper.

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*This paper is based on a study conducted by the author in partial fulfillment of the requirements for the Specialist in Education degree (1972). The original study is identified as ED 065218 in the ERIC System.

CULTURAL AWARENESS INVENTORY

Joseph D. Baca

Objective

The purpose of this study was to determine whether attitudes toward Mexican American students were associated with the ethnicity, age, and teaching experience of secondary school teachers in Dona Ana County, New Mexico.

Methods

A fifty item, seven-point Likert type instrument* was used to retrieve the data. The instrument had been used previously with small groups, but it had not been factored. This, then, was done using an iterative method of factor analysis. Items failing to correlate with a semantically meaningful factor at the .40 level were deleted from the fifty item instrument. Factor scores were computed for each subject's response on items retained in the factoring phase. Cronbach's alpha formula was used to compute reliability co-efficients for each of the six factors which resulted from the factor analytical process. Item reliability was established through item analysis. Mean scores and standard deviations were computed with Fisher's t Test for unmatched groups. Prior to testing for significant differences, F tests were computed to determine whether the two groups were of equal variance. A predictability factor of .05 was previously selected for testing the hypotheses.

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*The instrument was designed by Dr. Horacio Ulibarri of the University of New Mexico. It was used in this study with his approval.

Data Source

The total sample of the study was 125 secondary teachers selected from the three Dona Ana County school districts. The Anglo segment of the sample was randomly selected from a population of 366. All of the Mexican American population, 57, was included in the sample. Ninety-two percent (112) of the teachers participated in the study. Fifty-four percent (62) of the participants were Anglo. Fifty-two percent (58) of the participants were female. Age and teaching experience, stated in mean years, of the sample was thirty-three and eleven years, respectively.

Results

Factor analytic scoring. The factor analytic scoring of the instrument resulted in the retention of forty of the original fifty items for comparing the two groups. Every item assigned to the different clusters, (1) contained a number of excellent loadings, .40 and above; (2) was semantically meaningful, and (3) appeared to measure six areas of cultural awareness. Accordingly, the six constructs were labeled achievement, time orientation, acculturation, family identification, economics, and religiousity. The instrument, untitled previously, was at this time titled "Cultural Awareness Inventory." The forty legitimate items and their respective factor loadings are given in Table I. Reliability coefficients, using Cronbach's alpha formula, were computed for each of the constructs resulting from the factor analysis. The coefficients are given in Table II. The reliability of each of the forty items clustering under the six factors was established by item analysis. Seventeen of the items proved

significant at each of the three levels tested, i.e., .10, .05, and .01. Item reliability is given in Table III. The mean scores and standard deviations for each group derived by Fisher's t Test appear in Table IV.

Testing the Hypotheses. Upon examining the results of the factor analytic procedure, the first of the original hypotheses (ethnicity) was re-stated as six sub-hypotheses. This made it possible to compare the two groups with respect to ethnicity. Two-tailed t tests were computed to test for significant differences. Each of the following sub-hypotheses was tested at the .05 level of confidence for 109 degrees of freedom.

> Sub-hypothesis 1a. There is no significant difference in the attitude toward Mexican American students with respect to achievement between Mexican American and Anglo teachers in Dona Ana County's secondary schools.

The sub-hypothesis was rejected.

> Sub-hypothesis 1b. There is no significant difference in the attitude toward Mexican American students with respect to time orientation between Mexican American and Anglo teachers in Dona Ana County's secondary schools.

The sub-hypothesis was rejected.

> Sub-hypothesis 1c. There is no significant difference in the attitude toward Mexican American students with respect to acculturation between Mexican American and Anglo teachers in Dona Ana County's secondary schools.

The sub-hypothesis was rejected.

> Sub-hypothesis 1f. There is no significant difference in the attitude toward Mexican American students with respect to religiousity between Mexican American and Anglo teachers in Dona Ana County's secondary schools.

The sub-hypothesis was rejected.

The following sub-hypotheses did not reflect a significant difference in teacher attitude toward Mexican American students and were therefore rejected.

> Sub-hypothesis 1d. There is no significant difference in the attitude toward Mexican American students with respect to family identification between Mexican American and Anglo teachers in Dona Ana County's secondary schools.
>
> Sub-hypothesis 1e. There is no significant difference in the attitude toward Mexican American students with respect to economics between Mexican American and Anglo teachers in Dona Ana County's secondary schools.

Hypotheses II and III were not re-stated, since the results of the Fisher t Test did not reflect a significant difference in attitude toward Mexican American students between the two teacher groups with respect to age and teaching experience. Accordingly, the hypotheses were accepted as stated.

Educational Importance of the Study

Conclusions: The study indicates that, with exceptions, Anglo teachers and some Mexican American teachers in the three school districts investigated

1. do not know the Mexican American students despite arguments to the contrary.

2. do not fully recognize or appreciate what the school environment can or cannot do for its Mexican American clientele.

3. do not recognize the many talents and attributes the Mexican American students bring to the school which if acknowledged and used by them (the teachers) would benefit all students. Language is a good example. Large numbers of schools teach German or French or both,

and the remark is often made that it is "wonderful" to be bilingual. The Mexican American already is bilingual, but in his case it is a detriment.

School administrators, school boards, and society in general are likewise responsible for the Mexican American's educational plight, for teachers, more often than not, carry out their wishes. Teacher training institutions are also responsible. Nor is the home completely exonerated, and certainly the economic factor plays an important role. Since all of these factors affect the Mexican American in the school environment, change must occur in all of them.

Implications. The findings of this study indicate that significant differences exist between the two groups which have important implications for

1. The State Legislature. This body may find it expedient to direct the Department of Education to conduct studies on the status of minority group education.

2. The State Department of Education. This agency may find it expedient to conduct objective short and long-range studies of school environments to determine effect on culturally different students.

3. Local Boards of Education. These agencies may desire to identify the needs of "culturally different" students, not necessarily Mexican American, and decide what must be done to meet those needs. Based on findings, they may establish priorities in certain areas, e.g., organization, culturally relevant curricula.

4. For Teacher Training Institutions. These institutions may desire to encourage their professional staff and, through them, doctoral students to study the various components of the school to try to determine how these affect the school environment.

5. For Teachers and Administrators. These school leaders may want to commit themselves to the development of effective educational programs that consider certain characteristics of the client, e.g., skills and attitudes, and which emphasize cross-cultural education. The need for this was certainly revealed in the review of the literature and in the results of this study.

6. For further research. The present study was conceived and conducted as a preliminary effort to investigate in an empirical manner the attitudes of teachers toward Mexican American students. Results may be considered tentative pending additional research on a state-wide basis.

Recommendations. Solutions to the Mexican American's educational tragedy are neither quick nor easy. The answer lies in equal educational opportunity which the Mexican American has been denied through an unhealthy school environment. In line with this, I recommend that

1. The state's chief executive develop and announce a policy committing the state to achieving educational excellence for the "culturally different."

2. The state's chief executive appoint a task force to study the status of education for the "culturally different." Without data it is difficult to understand the problem of the "culturally different," and consequently they are ignored.

3. More effective pre-service programs be provided to prospective teachers. In reappraising present programs, teacher training institutions may find that some rather extensive surgery is necessary if their products are to satisfactorily cope with the "culturally different." Stopgap measures to which "cadet teachers" are exposed are not sufficient.

4. School districts initiate programs which will foster the development of positive attitudes toward ethnicity when the children first come to the school. This might be accomplished, not without difficulty to be sure, through bilingual, bicultural educational programs using specially trained teachers, e.g., Teacher Corps graduates.

5. That pilot demonstration schools, properly funded with local, state, and federal monies, and appropriately staffed with high calibre bilingual, bicultural teachers and aides, not necessarily Mexican American, be established. Home-school coordinators that might foster improved relations between the home and the school would also be used. This, hopefully, would lead to greater parental interest and involvement.

All of these recommendations point to the development of exemplary programs designed to help the Mexican American student cope with his emotional, social, and identity problems that, as the relevant literature reveals, keep him from succeeding in society. The programs, however, would be only as good as the planning and support received from all levels and the people employed to carry them out.

TABLE I

CULTURAL AWARENESS INVENTORY:
VARIMAX ROTATED FACTOR LOADINGS
(N=112)

Item No.	Item Description	Loadings I	II	III	IV	V	VI	h^2
	Achievement							
9	Low preference for achievement	55	12	16	-07	-09	23	41
27	Extra-marital relations frequent	51	26	37	-04	00	-05	47
30	Little value to formal education	75	13	17	-07	17	-01	64
31	Few parents cooperate with school	74	09	13	-06	04	-03	58
32	Educational goals for children few	62	21	15	-15	27	-15	57
38	Lack of perseverance in college	69	23	02	-21	11	-05	59
39	No goals at senior high level	51	29	09	39	20	-09	59
42	Do not appreciate Anglo values	66	-06	25	19	00	38	68
43	Content with meager subsistence	74	15	10	-11	13	02	60
44	Old conflict with young	51	00	20	-14	-22	12	38
	Time Orientation							
1	Are past and present oriented	13	47	-02	-02	09	05	29
2	Put off until "tomorrow"	36	62	09	-04	11	-01	58
3	Lacks definite concept of future	33	69	11	-29	03	06	68
4	Secure/stable in familiar ways	01	47	22	12	23	16	37
5	Mistrusts/fears changing future	15	66	14	-21	11	11	54
6	Tries to adjust to environment	15	63	-01	-10	33	14	56
19	Family size medium to large	14	58	30	-04	-04	28	53
	Acculturation							
10	Accepts unpleasant situations	24	20	44	-38	11	01	45
17	Less educated are superstitious	34	31	42	-35	08	11	54
25	Are cyclothmic in nature	31	19	45	-34	-12	00	46
33	Relations with school officials	39	36	56	00	17	-02	66
41	A developing middle class	-01	-07	77	-10	-01	04	61
46	Women work along side husband	-23	-01	-43	18	20	07	32
47	Adhere to folkway medicines	15	22	54	-30	19	34	61
48	Children are undernourished	17	15	57	-20	39	-05	57
49	Fear Anglo medical care	36	15	47	-09	24	29	52
50	Medical practices superstitious	34	17	65	-09	18	10	62

CONTINUED

TABLE I (Continued)

Item No.	Item Description	Loadings I	II	III	IV	V	VI	h^2
	Family Identification							
11	Formal organizations are rare	20	15	32	-40	11	01	34
14	Believe with a blind faith	35	31	18	-49	-06	-09	50
20	Father's authority supreme	21	22	22	-44	21	39	53
22	Girls overly chaperoned	-03	09	18	-63	10	09	46
23	Family transcend other values	19	12	21	-61	18	19	51
	Economic							
34	Leave school upon reaching CAA	27	32	26	00	54	19	57
35	Educational retardation common	16	43	22	24	58	-06	66
40	Majority hold lower class jobs	02	-09	06	-31	61	05	49
45	Low income group or on welfare	10	39	-13	-04	57	23	57
	Religiosity							
12	Extended family organization	-10	22	07	[illegible]	11	68	55
13	Are Catholic for most part	11	40	-03	[illegible]	-24	58	57
15	Life revolves around religion	15	09	25	-08	13	49	35
37	Students are bilingual	-23	08	-33	-08	07	48	41
	Eigenvalue	12.11	3.07	2.24	1.85	1.71	1.56	
	Variance	27.53	34.50	39.59	43.78	47.66	51.21	

TABLE II

RELIABILITY COEFFICIENTS FOR CAI FACTORS

Factor	Reliability Coefficient
Achievement	.67
Time Orientation	.56
Acculturation	.56
Family Identification	.45
Economic	.50
Religiosity	.56

TABLE III

CULTURAL AWARENESS INVENTORY (t VALUES RESULTING FROM ITEM ANALYSIS)
(N=112)

Item No.	Item Description	Means Gp. 1 "A"	Means Gp. 2 "MA"	t Values (109 df)
	Achievement			
9	Low preference for achievement	3.71	4.53	2.49*
27	Extra-marital relations frequent	3.90	4.73	3.16***
30	Little value to formal education	4.16	4.94	2.29**
31	Few parents cooperate with school	4.65	4.84	0.56
32	Educational goals for children few	4.13	4.76	2.07**
38	Lack perseverance in college	5.15	5.45	1.09
39	No goals at senior high level	4.29	4.90	1.86**
42	Do not appreciate Anglo values	4.02	4.53	1.73**
43	Content with meager subsistence	4.61	5.18	1.82**
44	Old conflict with young	3.34	3.39	0.17
	Time Orientation			
1	Are past and present oriented	3.39	3.61	0.75
2	Put off until "tomorrow"	4.10	5.10	2.94**
3	Lacks definite concept of future	3.84	4.61	2.12**
4	Secure/stable in familiar ways	3.24	3.61	1.26
5	Mistrusts/fears changing future	3.94	4.12	0.57
6	Tries to adjust to environment	3.71	4.45	2.16**
19	Family size medium to large	2.44	2.90	2.06**
	Acculturation			
10	Accepts unpleasant situations	4.02	4.00	0.05
17	Less educated are superstitious	3.71	3.90	0.60
25	Are cyclothmic in nature	3.76	4.22	1.43*
33	Relations with school officials	3.29	4.67	4.46***
41	A developing middle class	3.82	3.04	1.02
46	Women work along side husband	3.48	3.71	0.80
47	Adhere to folkway medicines	3.48	3.98	1.79**
48	Children are undernourished	4.39	4.53	0.49
49	Fear Anglo medical care	4.34	4.63	0.92
50	Medical practices superstitious	3.58	4.41	2.90**

CONTINUED

TABLE III (Continued)

Item No.	Item Description	Means Gp. 1 "A"	Means Gp. 2 "MA"	t Values (109 df)
	Family Identification			
11	Formal organizations are rare	4.47	4.37	0.31
14	Believe with a blind faith	4.00	4.31	0.90
20	Father's authority supreme	3.34	3.55	0.67
22	Girls overly chaperoned	4.53	3.90	2.29**
23	Family transcends other values	3.23	3.47	0.94
	Economic			
34	Leave school upon reaching CAA	3.15	3.84	2.29**
35	Educational retardation common	3.63	3.90	0.76
40	Majority hold lower class jobs	3.02	2.92	0.37
45	Low income group or on welfare	2.98	3.06	0.29
	Religiosity			
12	Extended family organization	2.95	2.98	0.09
13	Are Catholic for most part	2.31	2.49	0.87
15	Life revolves around religion	4.58	4.53	0.16
37	Students are bilingual	3.05	2.76	1.04

*.10 level of confidence = 1.29.

**.05 level of confidence = 1.66.

***.01 level of confidence = 2.63.

TABLE IV

MEAN SCORES, STANDARD DEVIATIONS, F RATIOS,
t VALUES, AND DEGREES OF FREEDOM
(ETHNICITY)

Variable	Mean Scores[a]		σ		F Ratio	t Value	df
	Gp. 1 "A"	Gp. 2 "MA"	Gp. 1 "A"	Gp. 2 "MA"			
Achievement	3.69	4.13	0.76	0.85	1.25	2.87	109
Time Orientation	3.77	4.29	1.10	1.23	1.25	2.33	109
Acculturation	3.30	3.58	0.62	0.85	1.88	2.00	109
Family Identification	3.37	4.10	1.25	0.97	1.66	1.07	109
Economic	3.70	3.90	0.91	1.05	1.33	1.06	109
Religiosity	3.12	3.51	0.78	1.08	1.92	2.19	109

[a]A larger score means a more positive attitude.